

**I. Project Title - “Louisiana Fire Training Records Network”**

**II. Principal Project Members - Project Leader**

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**III. Executive Summary**

The majority of Louisiana fire departments are volunteer organizations that provide fire protection to primarily rural and economically depressed regions of the state. Funding for these organizations, in most cases, is well below the level required to make substantial improvements to the organization. All organizations are legally mandated to maintain certain records and reporting systems to meet the requirements of the Property Insurance Association of Louisiana (PIAL), National Fire Protection Association (NFPA), and the Occupational Health and Safety Administration (OSHA). Yet, only a small percentage of Louisiana fire departments are able to comply with these standards. The two major hindrances to compliance are a lack of local funding that will allow small volunteer organizations to purchase expensive commercially available software and a lack of knowledge of what information is required to be retained and in what format.

LSU Fire and Emergency Training Institute (FETI) propose to create the **“Louisiana Fire Training Records Network”**. This project will involve the creation of an Internet accessible essential records storage system. Individual fire departments will have the ability to log on to the network to store fire department records in an electronic format, free of charge. Fire department and individual authorized users will have the ability to access the FETI records database to obtain training information about its department and individual members.

Non-compliance with records retention potentially places each organization at a legal disadvantage. PIAL conducts extensive fire department reviews at five-year intervals for the purpose of establishing fire insurance rates for the jurisdiction. PIAL has stated that the greatest negative impact to every fire department’s evaluation is its inability to properly document member training and equipment testing.

The ***“Louisiana Fire Training Records Network”*** will have a positive and permanent lasting effect on the Louisiana fire service. It will once and for all solve the fire service records retention and storage problem. The project will provide for the storage and retrieval of records in a uniform manner that meets legal and PIAL mandates. The outcome will directly benefit hundreds of fire departments and its tens of thousands of members.

#### **IV. Description of the Project**

##### **What are the project goals?**

The ***“Louisiana Fire Training Records Network”*** is an innovative approach to consolidating critical information for Louisiana’s 585 municipal fire departments. The project includes the development of a secure Internet accessible fire department records repository and the consolidation of existing records into an electronic format. The repository will provide for the storage of legally mandated training, hose testing, pump testing, hydrant testing, equipment inventory, and personnel files in a secure manner.

##### **What are the anticipated outcomes?**

The ***“Louisiana Fire Training Records Network”*** will provide quicker information access and a uniform storage approach for fire departments and individual users with the consolidation of information. This will aid Louisiana fire departments in providing required information to the PIAL in a uniform manner for the purposes of community fire insurance ratings. The project will provide a no advanced cost computer software access to economically disadvantaged organizations that cannot afford commercially available programs. The project will also increase the participating agencies’ efficiency and reduce records storage by converting conventional paper files into electronic data.

This will result in substantial individual cost savings to small volunteer fire departments that cannot afford commercially available software. The project will also provide the immediate availability of FETI training records.

##### **How will the proposed solution make a difference?**

The ***“Louisiana Fire Training Records Network”*** will provide for the establishment of a uniform records retention and storage system that meets PIAL and legal mandates. The PIAL rating evaluator will no longer have to guess what information the department is submitting in each required rating category. The establishment of a commonly acceptable system will provide the information in an easy and understandable format. This will result in the fire department receiving the highest consideration for the information they track and submit.

Undoubtedly, this feature alone will result in local fire departments receiving lower fire insurance ratings. The potential savings is tens of millions of dollars statewide to residential and commercial property owners over the five-year life of the rating.

### **How many sites are there and where are they located?**

Input and accessibility to the ***“Louisiana Fire Training Records Network”*** will be provided via the Internet. Primary access sites for the purpose of obtaining departmental training information will be extended to “authorized users” within 585 municipal fire departments. Access to firefighters’ personal individual training records and transcripts will be available from any Internet location. Entry into the system will require authorization.

### **Who are the users to be served?**

Directly, the ***“Louisiana Fire Training Records Network”*** will serve approximately 20,850 municipal and airport firefighters in Louisiana. This includes 585 municipal fire departments. Indirectly, the ***“Louisiana Fire Training Records Network”*** will benefit every community and resident in the State of Louisiana by aiding the local fire department in achieving a competitive score in the fire insurance rating process.

### **What organizations are participating as project partners?**

The project does not have any formal sharing partners. However, approximately 25 to 50 percent of the nation’s 32,000 fire departments have similar needs as identified by this project. PIAL will work closely with FETI in the development of the project and provide evaluation input. FETI and PIAL envision a huge success with the project and fully intend on promoting the project on a national level. The design components of the system are modular and this concept can be replicated on a state-by-state basis.

### **What technologies are to be employed?**

***“Louisiana Fire Training Records Network”*** has two major components:

The project will use Oracle 9i Internet Application Server with Oracle 9i database. The application server portal will provide fully web-based, user-friendly, customized and most importantly secure administration for each fire department to manage their training records.

The second component is LaserFiche, a web-enabled document management system that will make old FETI training records (departmental transcripts, individual transcripts, etc.) securely available to fire departments and individuals with proper authentication.

### **What will the users do with the technology?**

The authorized users can add, update, delete, view, and in other words, manage their entire training records online at the “**Louisiana Fire Training Records Network**” web site.

A fire department authorized personnel, such as the Fire Chief, will be able to log on to the “**Louisiana Fire Training Records Network**” will proper authentication. He can then enter training records pertaining to his fire department in a predefined form. The Fire Chief can also generate and print reports of any training records related to his department.

An individual firefighter can also log on to the system with proper authentication and access his/her records for any training provided by LSU Fire and Emergency Training Institute. He or she can then generate reports and print out transcripts. However, individual users will not be able to make any changes to the training records.

### **B. Use of Innovative Technology**

The major hardware and software technology used in the project will be off the shelf servers and commercially available databases. However, its application and availability is the key to its uniqueness.

The inability of local fire departments to meet certain records retention problems has always been identified as the largest obstacle faced during the rating evaluation. PIAL has conducted numerous statewide training programs to inform local fire departments about the rating process and what information should be retained and in what form. However, PIAL has stayed clear of recommending one commercially available software package over another for fear of commercial bias. PIAL follows the nationally recognized Insurance Service Office (ISO) and ISO does not recommend or specify brands or types of software nor does it provide common forms for records retention. Each department, for the most part, is to figure out the process on their own. Unfortunately, this has not been successful.

FETI and PIAL will collaborate on how the records are to be retained and in what format. FETI will design the system to meet not only PIAL recommendations, but meet other fire service legal mandates. This approach will once and for all solve

the dilemma that nearly all fire departments face--what should I retain and what should it look like.

The solution to this problem is simplistic in nature, yet has not been implemented by any other state fire service training organization or at a national level. In discussions with neighboring state fire service training organizations, the same problem is experienced elsewhere. In discussing the concept of this project and its possible applications, the overwhelming comment was, "Why didn't we think of this!"

The planners are confident that this program will serve as a national model for the nation's fire service with far reaching benefits. The planners fully intend on writing papers and making presentations, encouraging other states to follow Louisiana's model. And, with today's increased awareness to the importance and vitality of properly trained fire service personnel, the interest and immediate application by other states will be an assurance, not only to the fire departments and fire service personnel, but also to the communities relying on the competence of those firefighters serving their safety interests.

### **C. Multi-agency Application or Portability to Other Agencies**

The project will provide direct access to all Louisiana fire departments. Recent fire service computer use surveys by FETI indicates that over 90 percent of all Louisiana fire departments have access to computers and 60 percent have Internet access. Yet, less than 20 percent of Louisiana fire departments have computerized their records into an electronic format.

The estimates from PIAL place total compliance with acceptable fire department records retention at less than 30 percent with either computer or hard copy storage. Clearly, nearly 70 percent of Louisiana fire departments either do not have the proper system to retain documentation or lack the amount and type of records that are required. There is every indication to believe that this same problem is experienced nationally.

### **D. Benchmarking Partners and/or Best Practice References**

This project has not been attempted at the level as proposed. Commercial software is available to meet a portion of the scope. The cost of this software is prohibitive to most rural volunteer fire departments.

FETI will collaborate with Mr. Blaine Rabe, Municipal Rating Supervisor, PIAL, for the design and formatting of the program. Mr. Rabe will liaison PIAL's and FETI's efforts with Mr. Ed Marsh, ISO, to ensure that all programs and the intent of the projects meets with ISO's approval.

## **E. Long-range planning**

The creation of the “**Louisiana Fire Training Records Network**” meets with the general direction of FETI’s efforts to aid in the modernization of the Louisiana Fire Service. FETI is becoming a forerunner in the nation for the design and implementation of computer-aided programs for the fire service.

FETI has received a grant from the U.S. Department of Commerce for the development of Internet based fire service training programs. The Fire Information Network (FIN) is a three-year project that concludes with the development of several interactive training programs designed to bridge the training gap that exists with the state’s volunteer fire service. FIN will permit firefighters to access training programs via the Internet and allow the member to progress at their own pace. FIN offers a practice test database for Civil Service promotional tests and third party certification tests. The Louisiana Fire Service experiences a very high first time test failure rate for these two elements, and the creation of this feature is envisioned to correct this deficiency.

FIN has secured a grant from the Louisiana Board of Regents for the conversion of advanced courses (40-80 hour) into Internet delivery. In the past, these programs were only available at the FETI campus. This presented a logistical and economic disadvantage to most volunteer firefighters. This program will allow volunteer firefighters and members of smaller career department’s greater access to these programs. FETI has entered into several articulation agreements with the LSU-Eunice Fire Science Associate Degree Program to allow participating members to receive college credit for successful completion of these courses. This effort will further enhance the credibility of Louisiana Fire Service training.

The creation of the “**Louisiana Fire Training Records Network**” will enhance FETI’s modernization efforts and maximize the use of computer-aided technology for the Louisiana Fire Service.

## **F. Performance Goals**

The Performance Goals of the project involve two major aspects. The first major goal is the design, installation, and completion of the records retention system. The second major goal involves getting the fire service to embrace the idea the concept computerization of records and the actual use of the system.

Completion of the first goal involves reviewing equipment, hardware, and software specifications and purchasing the necessary items for the project. Pivotal for this portion is the development of user-friendly programs and the importation of existing FETI records databases into a retrievable format.

The second element involves the utilization of the FETI staff to conduct statewide training and familiarization sessions. This element will also involve PIAL's input into the process and their involvement in promoting the project.

FETI estimates that approximately 150 Louisiana Fire Departments will utilize the full potential of the system. All of the states 585 fire departments will use the system to some extent. Although these raw numbers represent a large portion of the state fire service and indicates the programs success, the overall concern of the project planners is the outcome of behavior modification.

The "**Louisiana Fire Training Records Network**" is one of three major projects that FETI is undertaking to bring the Louisiana Fire Service onto the 21<sup>st</sup> century technology. The use of the Internet and embracing of computerization as a functional tool is tantamount for the Louisiana Fire Service to improve its service delivery to the public. To date the other program have been well received and there is every indication that the over all outcome of greater computer use participation will occur.

#### **G. Technical Approach**

(See Appendix 1. for a diagram of the proposed information system)

**"Louisiana Fire Training Records Network"** will run on Oracle 9i Application Server, Oracle 9i Database and LaserFiche Document Management System. The main criterion for choosing these software packages is: a.) Ease of implementation and maintenance; b.) High scalability; c.) Based on standard technologies; d.) Minimal technical requirements on the part of the end-user; and e.) Successful implementation at a large number of institutions.

The **Louisiana Fire Training Records Network** consists of four components:

1. **Application Server:** Oracle 9i Application Server is a 100% standards based application server that provides a complete and fully integrated platform for running web sites, web services and Internet applications. This software package allows rapid development and delivery of web applications that run fast and are accessible from any computer on the Internet with traditional web browsers. The application server will also allow managing and securing "**Louisiana Fire Training Records Network's**" web infrastructure.
2. **Database Server:** Oracle 9i database has been chosen as the data repository. This database is tightly integrated with Oracle 9i Application Server and works seamlessly with it. This database package is known for its high availability, scalability, performance and security.

3. **Imaging Server:** LaserFiche has been chosen as the tool to provide old paper-based training records on the Internet. It allows easy archiving, managing as well as authentication based retrieval on the web. The system uses Microsoft SQL server as the data repository and Microsoft IIS as the web server.
4. **High Availability Server Appliance:** To ensure 24X7 service a high availability server appliance will be used. This server will monitor traffic on the T-1 circuits and will redirect traffic based on the load on the circuits and in case of network outage.

#### ***INTEROPERABILITY***

The “***Louisiana Fire Training Records Network***” will run on standard HTTP/1.1 protocol and all the computers will be connected through TCP/IP protocol. This means anyone with a connection and a web browser to the Internet can access the application. The system also makes use of freely available technologies such as Java and JavaScript supported web browsers (for example, Internet Explorer, Netscape Navigator, etc), which come preinstalled on many modern personal computers. Therefore, users using different operating systems (for example, Windows, Mac OS, UNIX, Linux, etc) will be able to use the Louisiana Fire Training Records Network. For data manipulation, the system will use Standard Query Language (SQL), which is widely supported in most Relational Database Management Systems (RDBMS) such as Oracle 9i.

#### ***MAINTENANCE***

Oracle 9i Application Server, Oracle 9i database and LaserFiche are off-the-shelf products that come with yearly licensing that includes service agreements. Maintenance for all the software packages is included in the yearly service contract. All the proposed hardware components also have 3 years service contracts with the respective vendors.

#### ***SCALABILITY***

The entire system is modular which assures scalability. This allows any of the components to be added, upgraded or replaced with minimal or no change to the others. Accommodation of future users can be easily done with a simple addition of hard disks, memory modules, Network Interface Cards (NICs), or an implementation of an application and/or database server in association with load balancing features without writing a single line of coding. Both Oracle 9i and Oracle 9i Application Server are inherently extremely scalable. Network bandwidth can be upgraded with the installation of new circuits. As site access increases, the quality of the service offered will be continually monitored to ensure reliable and fast access, program reliability and availability.



## Implementation Approach

The major milestone for the development and implementation of the “**Louisiana Fire Training Records Network**” is as follows:

<div>MILESTONE</div>	<div>First Quarter</div>	<div>Second Quarter</div>	<div>Third Quarter</div>	<div>Fourth Quarter</div>	<div>Fifth Quarter</div>	<div>Sixth Quarter</div>	<div>Seventh Quarter</div>	<div>Eighth Quarter</div>
1. Review equipment, hardware, and software specifications. Place all items out for bid and acquire.	X							
2. Interview and hire programmers for the project.		X						
3. Install and configure Application Server.		X						
4. Install and configure Database Server.		X						
5. Install and configure Imaging Server.		X						
6. Install and configure High Availability Server Appliance.		X						
7. Interview and hire data entry positions.		X						
8. Acquire FETI records history.		X	X					
9. Import FETI records into system.			X	X	X	X	X	X
10. Develop programs for records retention system.			X	X	X			
11. Testing and debugging for program applications.				X	X	X		
12. Conduct statewide fire service training programs and promotion of program.					X	X		
13. Monitor and assist FD's with data entry.						X	X	X
14. Conduct program evaluation.								X

The milestones listed represent the major goals of the projects that are necessary for successful completion. Prior to initiation, a detailed listing of enabling objectives will be completed for each major goal. These objectives will provide a clear and concise time frame for completion and the evaluation methods necessary.

## **H. Assessment of Risks**

There are three major risks associated with the implementation of this project. The first is the security of the records database from unauthorized entry. Fundamental safeguard measures to prevent unauthorized entry will involve the use of username and passwords.

Both the application and database servers will run PortSentry, a port scan detector that takes an active stance to shut down attacking hosts while notifying the administrators. Both servers will also run Demarc PureSecure Intrusion Detection System (IDS) that allows administrators to monitor an entire network of servers from one powerful web interface. IPTables based firewall will also be implemented on these servers.

The Imaging server will run WatchGuard AppLock/Web to prevent unauthorized entry to Microsoft IIS web server. WinSSHD will also be implemented to facilitate secure encrypted remote administration. Webtrends Analysis suite will be used to monitor web traffic on this server.

All the servers will also have Secure Socket Layer (SSL) with 128-bit strong encryption to protect user data. An encrypted SSL connection requires all information sent between a client and a server to be encrypted by the sending software and decrypted by the receiving software.

The second element involves getting the fire service to use computers. FETI has been actively involved in providing the state's fire service with information on how to obtain computer systems from state contract. These efforts have resulted in a greater number of fire departments obtaining computer systems at lower costs.

The third and most important risk element is getting the fire departments to maintain accurate records. FETI will redouble its education efforts to ensure that every fire department is knowledgeable of what records are supposed to be kept and how they should be retained. This will include informational training sessions offered through the FETI regional instructor staff, posting information on the FETI Website, and liaison with PIAL's field evaluators.

## **I. Integration with Existing Technologies**

The culmination of this project is envisioned to converting the Louisiana Fire Service from “**pencils to computers.**” Records retention and information dissemination is a crucial element for any organizations success. This is most evident for the delivery of fire protection services. The lack of crucial records and accessibility has led to increased fire insurance rates for residents of Louisiana. Fire departments and local jurisdictions face increased liability exposure from a lack of substantial records. The failure to have necessary information available leads to inefficient operations. This project represents final cost effective solution to the problem.

Every parish has Internet access through schools, libraries, and government centers. Every fire department in the state has Internet access capabilities. Although the bandwidth and modem speed varies in many regions of the state and the number of Internet providers is limited in some remote areas, affordable access is there.

The project is designed to be user friendly. Other than a conventional PC with Internet access, no other specialized equipment, software or hardware is necessary for the end users.

## J. Project Budget and Costs

1. **Equipment:** Includes the cost of servers, personal computers, peripherals, and related hardware for the project.

Database Server: One (1) database server will be housed at FETI as the repository of all training record data. The server will run Oracle 9i database. Cost: \$36,317.00.

Application Server: One (1) application server will be housed at FETI. It will host the web server and all web applications. The server will run Oracle 9i database. Cost: \$36,317.00.

Imaging Server: One (1) imaging server will be located at FETI. It will run LaserFiche imaging server along with Microsoft IIS web server and MS SQL server. Cost: \$28,354.00.

Server Appliance: One (1) server appliance will be used to ensure 24X7 service availability. Cost: \$19,999.00.

Backup Autoloader: One (1) autoloader will be implemented to backup all critical data. Cost: \$10, 956.00.

Personal Computer: Five (5) personal computers will be installed at FETI for developing programs. Each computer will be connected to FETI local area network. Cost: \$2,458.00 ea.

High speed Scanner: Four (4) high-speed scanners will be used to scan old FETI training records into LaserFiche imaging server. Cost: \$3,714.00 ea.

Server Cabinet: One (1) 42U server cabinet will be housed at FETI to optimize server space. Cost: \$2,627.00.

Keyboard/Monitor Switchbox: Two (2) keyboard/monitor switch box will be added to the system to be able to operate all the servers with single input device. Cost: \$639.58

EQUIPMENT COST SUMMARY			
ITEM	QUANTITY	UNIT PRICE	TOTAL
Database Server	1	36,317.00	36,317.00
Application Server	1	36,317.00	36,317.00
Imaging Server	1	28,354.00	28,354.00
Server Appliance	1	19,999.00	19,999.00
Backup Autoloader	1	10,956.00	10,956.00
Personal Computers	5	2,458.00	12,290.00
High Speed Scanner	4	3,714.00	14,856.00
Server Cabinet	1	2,627.00	2,627.00
Keyboard/Monitor Switchbox	2	639.00	1,279.00
<b>TOTAL</b>			<b>\$162,995.00</b>

**2. Software:** Includes the cost for acquiring, licensing, and maintenance of software, including vendor provided installation and training costs for the project.

Oracle 9i Database: Oracle 9i database Enterprise will be installed on a two-processor database server. This is the database management system for all training records. Cost: \$40,000 per processor.

Oracle 9i Internet Application Server: This is the primary software that will run the web server along with related web applications. Cost: \$20,000.00 per processor.

Internet Developer Suite: This is the program that FETI programmers will use to develop web-enabled applications for the project. Cost: \$5,000.00.

Updates Subscription Service for Oracle: This is the yearly service contract will update Oracle 9i database and application server software with newer versions, security patches etc. This is a two-year service. Cost: \$18,000.00.

Product Support for Oracle: This is the technical support for Oracle 9i database and application server. This is a two-year support. Cost: \$8,400.00.

LaserFiche Server: This is the server software for the imaging system. The system has web connectivity to deliver scanned training records over the web. The software will be installed on a dual processor server. The cost of the software includes one year of support. Cost: \$34,959.00.

Updates Subscription Service for LaserFiche: This service ensures the availability of latest software and patches of LaserFiche. This is for two years. Cost: \$17,960.00.

MS SQL Server: This is the database management system for the imaging system. This will be installed on the same dual processor server as the LaserFiche imaging software. Cost: \$5,000.00 per processor.

Windows 2000 OS 64bit: This is the operating system for the server that will host the imaging system. Cost: \$3,999.00.

LaserFiche Installation: LaserFiche require s professional installation by the vendor to ensure warranty. Cost: \$2,990.00.

LaserFiche User Training: This is to train 8 staff to the use and administration of LaserFiche. Cost: \$1,990.00.

Software Media for Oracle: This is the software media for Oracle 9i database and Application server software. Cost: \$199.00.

Red Hat Professional OS: This is the operating system that Oracle database and application servers will run on. Cost: \$199.00.

Photoshop: An image manipulation program to create graphics for the web. Cost: \$609.00.

Adobe Acrobat: This is the Portable Document Format (PDF) file creator. This will be used to provide downloadable documents from the project web site. Cost: \$249.00.

Vmware: This software will be used to run virtual operating systems on Windows or Linux platforms. It will be used by the programmers to test developed applications on different platforms. Cost: \$329.00.

Veritas Backup: This is the software that will be used with the backup system. The software will automate day-to-day backup process. Cost: \$795.00.

WatchGuard AppLock/Web: This is a firewall software for Microsoft IIS web server to prevent unauthorized entry and tampering with the web server. Cost: \$795.00.

WinSSHD: This program will enable secure remote administration of the WIN2000 server. Cost: \$599.00.

Webtrends Analysis Suite: This analysis tool that allows to make better decision by analyzing how the end users are using the web applications. Cost: \$1,199.00.

SOFTWARE COST SUMMARY			
ITEM	QUANTITY	UNIT PRICE	TOTAL
Oracle 9i Database Enterprise	2	40,000.00	80,000.00
Oracle Internet Application	2	20,000.00	40,000.00
Internet Developer Suite	1	5,000.00	5,000.00
Updates Subscription Service for Oracle	1	18,000.00	18,000.00
Product Support for Oracle	1	8,400.00	8,400.00
LaserFiche Server (Dual Processor)	1	34,959.00	34,959.00
Updates Subscription for LaserFiche	1	17,960.00	17,960.00
MS SQL Server	2	5,000.00	10,000.00
Windows 2000 Operating System 64bit	1	3,999.00	3,999.00
LaserFiche Installation	1	2,990.00	2,990.00
LaserFiche User Training (8 staff)	1	1,990.00	1,990.00
Software Media	1	199.00	199.00
Red Hat Professional Operating System	1	199.00	199.00
Photoshop	1	609.00	609.00
Adobe Acrobat	1	249.00	249.00
Vmware	1	329.00	329.00
Veritas Backup	1	795.00	795.00
WatchGuard AppLock/Web	1	795.00	795.00
WinSSHD Secure Remote Administration	1	599.00	599.00
Webtrends Analysis Suite	1	1,199.00	1,199.00
<b>TOTAL</b>			<b>228,271.00</b>

3. **Telecommunications:** Includes the cost for all data lines, circuits and any equipment bundled with the circuit cost.

T-1 circuit and DSU: One T-1 circuit will be installed in the existing FETI network to provide uninterruptible service and to share load of network traffic. The circuit will be connected to LSU main campus backbone through a Wide Area Network (WAN). Cost: \$4,000.00.

T-1 usage fee: This is the cost for use of the T-1 service per month. Cost: \$400.00.

Router: A network will be installed in the FETI existing network to route Internet traffic. Cost: \$3,300.00.

24-port switch: A switch will be installed to connect the servers to the network. Cost: \$2,000.00.

Data drops: Fifteen (15) data drops will be installed for the servers and the workstations to be able to access the local area network. Cost: \$300 per drop.

Data Drop Penetrations: Fifteen (15) data drops penetrations will need to be made to install the data drops. Cost: \$75.00 per penetration.

Data drop usage fee: This is the month usage fee to use the data drops. Cost: \$18.00 per drop.

TELECOMMUNICATIONS COST SUMMARY			
ITEM	QUANTITY	UNIT PRICE	TOTAL
Database T-1 circuit and DSU	1	4,000.00	4,000.00
T-1 usage fee	24	400.00	9,600.00
Router	1	3,300.00	3,300.00
24 port Switch	1	2,000.00	2,000.00
15 data drops	15	300.00	4,500.00
15 penetrations	15	75.00	1,125.00
Data drops usage fee	360	18.00	6,480.00
<b>TOTAL</b>			<b>31,005.00</b>

**4. Professional/Contracted Services:** Includes the cost of professional programming and contract related services for the project.

Web Security Training: This is a training package for the Webmaster to ensure that all web servers are securely configured to prevent intrusion. Cost: \$4,690.00.

Oracle database Training: This is for both the application developers and the database administrator to maximize the efficiency of the programs developed and the database. Cost: \$10,580.00.

Win2000 and SQL server security Training: This is for the Win2000 system administration and SQL server database administrator to ensure proper safeguarding of the Imaging server running Win2000 and SQL server. Cost: \$18,000.00.

Consulting Services: Some third party consultation will be needed to test and evaluate system security and vulnerabilities. Cost: \$20,000.00.

Data Entry Clerk: Cost for two Weststaff contract data entry positions working 40 hours per week for 60 weeks at \$12.00 per hour. Cost \$57,600.00

Programmers: Some of the advanced web application development work will be contracted out to ensure top quality software products. The project is estimated at 1500 hours @ \$100.00 per hour. Cost \$150,000.00.

PROFESSIONAL/CONTRACTED SERVICES COST SUMMARY			
ITEM	QUANTITY	UNIT PRICE	TOTAL
Web Security Training	1	4,690.00	4,690.00
Oracle database Training	1	10,580.00	10,580.00
Win2000 and SQL server security training	1	8,000.00	18,000.00
Consulting Services	1	20,000.00	20,000.00
Data Entry Clerks			
(2 @ 40 hrs/wk x 60 weeks @ \$12.00/hr.)	4800	12.00	57,600.00
Programmer (1500 hrs @ \$100/hr)	1500	100.00	150,000.00
<b>TOTAL</b>			<b>\$260,870.00</b>



5. **Other:** Includes the cost of items not otherwise listed for the project.

UPS: An uninterruptible power supply will be installed in case of a power failure to ensure that servers are not shutdown unexpectedly. Cost: \$780.00.

Storage Media: CD-Rs, zip disks, floppy disks, back up tapes, etc. will be needed to store development work. Cost: \$5,000.00.

20 a., 120v., 3 wire dedicated circuit: This is a power supply outlet to provide electricity to the servers. Cost: \$250.00.

OTHER COST SUMMARY			
ITEM	QUANTITY	UNIT PRICE	TOTAL
UPS	1	780.00	780.00
Storage media	1	5,000.00	5,000.00
20 a., 120v., 3 wire dedicated circuit	1	250.00	250.00
<b>TOTAL</b>			<b>\$6,030.00</b>

## V. Funding Requested

FETI will cost share Indirect Costs at the Federal negotiated rate of 47% identified in the each applicable category. FETI shall also provide management and administrative personnel assigned to the project and those expenses are identified in the Professional Services Category. This shall include 10% of FETI Computer Analyst, Grants Manager, Associate Director, and Business Managers salary for the two-year duration of the project. This is estimated at \$24,234 per year and this includes a fringe rate of 22%.

FUNDING CATEGORY	TOTAL COST	OTHER SOURCES	FUNDING REQUEST
Equipment	162,995.00	00.00	162,995.00
Software	335,458.00	107,287.00	228,271.00
Telecommunications	45,577.00	14,572.00	31,005.00
Professional Services	454,726.00	193,856.00	260,870.00
Other	8,873.00	2,843.00	6,030.00
<b>Total</b>	<b>1,007,629.00</b>	<b>318,558.00</b>	<b>689,071.00</b>

## VI. Cost/Benefit Analysis

The anticipated recurring costs associated with this project is as follows:

COST	EXPENDITURE INCREASE (DECREASE)		
	2001-02	2002-03	2003-04
Personnel Services	-0-	-0-	-0-
Operating Services	-0-	-0-	-0-
Professional Services	-0-	-0-	-0-
Other Changes	-0-	-0-	\$10,000
Equipment	-0-	-0-	-0-
<b>Total</b>	<b>-0-</b>	<b>-0-</b>	<b>\$10,000</b>

The \$10,000 is estimated at maintenance expenses for the server system.

# LOUISIANA FIRE RECORDS NETWORK

## APPENDIX 1

